

AMENDMENTS

IN THE CLAIMS

Please amend claims 1, 5 and 15, as shown. A complete set of the claims, including their current status, is shown below.

1. (Currently amended) A method of activating an oocyte *in vitro*, the method comprising:
- ~~injecting contacting a non-activated oocyte with~~ nitric oxide (NO), ~~an a nitric oxide~~ NO donor, nitric oxide synthase (NOS), or inducer of nitric oxide synthase NOS into a non-activated oocyte in an amount effective to activate said oocyte; and,
- ~~maintaining said oocyte until the oocyte has undergone at least one cell division;~~
- maintaining said oocyte until pronuclei have formed and migrated within the oocyte,
- wherein said activation is performed in the absence of sperm ~~and wherein an oocyte that has undergone at least one cell division indicates that the oocyte is activated.~~
2. (Cancelled)
- ~~2.~~ 3. (Previously amended) The method according to claim 1, wherein said oocyte is a mammalian oocyte.
- ~~3.~~ 4. (Original) The method of claim 3, wherein said oocyte is a human oocyte.
5. (Currently amended) A method of inhibiting oocyte activation during fertilization *in vitro*, the method comprising:
- ~~injecting contacting a non-activated oocyte with~~ a nitric oxide synthase inhibitor into a non-activated oocyte; and then
- contacting said oocyte with sperm,
- wherein said oocyte is inhibited from activation during fertilization *in vitro*.

13. (Previously amended) ~~The method of claim 5, wherein said oocyte is a human oocyte.~~

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13. (Currently amended) A method of activating an oocyte *in vitro*, the method comprising:

~~injecting contacting a non-activated oocyte with~~ nitric oxide (NO), ~~an a nitric oxide~~
NO donor, nitric oxide synthase (NOS), or inducer of nitric oxide synthase NOS into a non-
activated oocyte in an amount effective to activate said oocyte; and

maintaining said oocyte until pronuclei have formed and migrated within the
oocyte.

~~contacting said activated oocyte with sperm to inseminate said oocyte; and~~
~~maintaining said inseminated oocyte until the inseminated oocyte has undergone at~~
~~least one cell division;~~

³¹
~~wherein an inseminated oocyte that has undergone at least one cell division indicates~~
~~that the inseminated oocyte is activated.~~

16-18. (Cancelled)

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19. (New) The method of claim 1, wherein said injecting is microinjecting.

20. (New) The method of claim ~~5~~, wherein said injecting is microinjecting.

⁶
21. (New) The method of claim 15, wherein said injecting is microinjecting.
